

Remarks

I. Status of the Claims

Claims 1-6 and 15-20 are pending in the application, with claim 1 being the sole independent claim. Claims 15-20 have been allowed, and claims 1-6 have been rejected.

II. Summary of the Office Action

In the Office Action dated June 4, 2002, the Examiner has made two rejections of the claims. Applicant respectfully offers the following remarks to overcome or traverse these rejections.

III. The First Obviousness-Type Double Patenting Rejection

In the Office Action at pages 2-3, the Examiner has rejected claims 1-6 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-15 of commonly owned, co-pending U.S. Appl. No. 09/229,173, filed January 13, 1999, published as US 2003/0027296 A1 on February 6, 2003 (hereinafter "the '173 application"). Applicant respectfully traverses this rejection, and disagrees with the Examiner that claims 1-6 of the present application are not patentably distinct over claims of the '173 application.

Applicant first notes that in the Office Action, the Examiner has initially indicated that this double-patenting rejection is "over claims 11-15" of the '173 application. *See* Paper No. 17 at page 2, final two lines. However, the Examiner then proceeds to discuss the

patentability of claims 1-6 in the present application over "claims 13-17" of the '173 application. *See, e.g.*, Paper No. 17 at page 3. Therefore, Applicant is unclear whether the present double patenting rejection is being asserted over claims 11-15 or over claims 13-17 of the '173 application. Moreover, Applicant notes that claims 11, 12, 14 and 15 are not pending in the '173 application, having been cancelled from that application in a Preliminary Amendment filed on January 13, 1999, with the '173 application itself. Accordingly, Applicant respectfully requests that the Examiner clarify, on the record, which claims in the '173 application are being used as the basis for rejecting claims 1-6 in the present application for obviousness-type double patenting.

In any event, to expedite allowance of the present application, and not in acquiescence to this rejection, filed concurrently herewith is a terminal disclaimer in compliance with 37 C.F.R. § 1.321(c). Applicant notes that the present application and the '173 application are commonly owned by Invitrogen Corporation. The '173 application was assigned by Applicant to Life Technologies, Inc. ("LTI"), in an Assignment in parent U.S. Appl. No. 08/706,702, filed September 6, 1996 (now U.S. Patent No. 5,948,614). That Assignment was recorded at Reel 8212, Frame 0827, on November 6, 1996.¹ The present application was assigned by Applicant to LTI in an Assignment in parent U.S. Appl. No. 08/576,759, filed December 21, 1995 (now abandoned). That Assignment was recorded at Reel 7842, Frame 0273, on December 21, 1995.¹ LTI merged with Invitrogen Corporation on September 14, 2000, with Invitrogen Corporation being the surviving corporation of the

¹ Applicant assumes that the Examiner can take notice of, and/or locate in the appropriate databases of the Assignment Branch of the USPTO, the recordation of Assignments for which the reel and frame numbers are provided herein. However, if copies of the Notices of Recordation are required to evidence these recorded assignments, the Examiner is invited to telephone Applicant's undersigned representative.

merger. A copy of the Certificate of Merger between LTI and Invitrogen Corporation was recorded against the present application at Reel 012339, Frame 0912, on December 4, 2001.¹

A copy of the same Certificate of Merger was filed for recordation in the USPTO against the '173 application on October 9, 2003 (copies of filing documents attached hereto as Exhibit A). Accordingly, both the '173 application and the present application are currently owned by Invitrogen Corporation. Therefore, Applicant respectfully asserts that the accompanying Terminal Disclaimer is in full compliance with the requirements of 37 C.F.R. § 1.321.

In view of the foregoing remarks, the obviousness-type double patenting rejection of claims 1-6 over the '173 application has been overcome. Reconsideration and withdrawal of this rejection are respectfully requested.

IV. The Second Obviousness-Type Double Patenting Rejection

In the Office Action at page 4, the Examiner has rejected claims 1-6 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-15 of commonly owned U.S. Patent No. 5,948,614, issued September 7, 1999 (hereinafter "the '614 patent"). Applicant respectfully traverses this rejection, and disagrees with the Examiner that claims 1-6 of the present application are not patentably distinct over claims 11-15 of the '614 patent. However, to expedite allowance of the present application, and not in acquiescence to this rejection, filed concurrently herewith is a terminal disclaimer in compliance with 37 C.F.R. § 1.321(c). Applicant notes that the present application and the '614 patent are commonly owned by Invitrogen Corporation. As noted above, the '614 patent was assigned by Applicant to LTI in an Assignment in U.S. Appl. No. 08/706,702, filed

September 6, 1996, which Assignment was recorded at Reel 8212, Frame 0827, on November 6, 1996.¹ As also noted above, the present application was assigned by Applicant to LTI in an Assignment in parent U.S. Appl. No. 08/576,759, filed December 21, 1995 (now abandoned), which Assignment was recorded at Reel 7842, Frame 0273, on December 21, 1995.¹ LTI merged with Invitrogen Corporation on September 14, 2000, with Invitrogen Corporation being the surviving corporation of the merger. As noted above, a copy of the Certificate of Merger between LTI and Invitrogen Corporation was recorded against the present application at Reel 012339, Frame 0912, on December 4, 2001.¹ A copy of the same Certificate of Merger was filed for recordation in the USPTO against the '614 patent on October 9, 2003 (copies of filing documents attached hereto as Exhibit B). Thus, both the '614 patent and the present application are currently owned by Invitrogen Corporation. Applicant therefore respectfully asserts that the accompanying Terminal Disclaimer is in full compliance with the requirements of 37 C.F.R. § 1.321.

Accordingly, the obviousness-type double patenting rejection of claims 1-6 over the '614 patent has been overcome. Reconsideration and withdrawal of this rejection are respectfully requested.

V. Request for Interference

Applicant reiterates and incorporates herein by reference the Request for Interference Under 37 C.F.R. § 1.607 that was filed in the present matter on December 4, 2001. On the basis of this timely and properly filed Request for Interference, Applicant further respectfully

requests that an interference be expeditiously declared between the present application and U.S. Patent No. 5,614,365.

VI. Conclusion

All of the stated grounds of rejection have been properly traversed. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all of the outstanding rejections, and allow all pending claims. It is believed that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance and for immediate declaration of the above-noted interference. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Brian J. Del Buono
Attorney for Applicant
Registration No. 42,473

Date: Oct. 15, 2003

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Washington, D.C. 20005
(202) 371-2600

::ODMA\HODMA\SKGF_DC1;187295;1

COPY

Applicant: CHATTERJEE, Deb K.

Art Unit: 1652

Application No.: 09/229,173

Examiner: Hutson, R.

Filed: January 13, 1999

Docket: 0942.2800008

Atty: RWE/RCM/GLL

For: Cloned DNA Polymerases from *Thermotoga maritima* and Mutants Thereof

When receipt stamp is placed hereon, the USPTO acknowledges receipt of the following documents:

1. SKGF Cover Letter;
2. Fee Transmittal Form (PTO/SB/17);
3. Recordation Form Cover Sheet (Form PTO-1595);
4. Merger document between Life Technologies, Inc. and Invitrogen Corporation, effective September 14, 2000 (3 pages), official recordation and return of which are respectfully requested;
5. Credit Card Payment Form in the amount of \$40.00 to cover Recordation fee; and
6. One return postcard.

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*Admitted only in Maryland
*Admitted only in Virginia
*Practice limited to
Federal Agencies

October 9, 2003

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Director of the United States
Patent and Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Assignment Recordation Services

Re: U.S. Utility Patent Application
Appl. No. 09/229,173; Filed: January 13, 1999
For: **Cloned DNA Polymerases from *Thermotoga maritima* and Mutants
Thereof**
Inventor: CHATTERJEE, Deb K.
Our Ref: 0942.2800008/RWE/RCM/GLL
Art Unit: 1652

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Fee Transmittal Form (PTO/SB/17);
2. Recordation Form Cover Sheet (Form PTO-1595);
3. Merger document between Life Technologies, Inc. and Invitrogen Corporation, effective September 14, 2000 (3 pages), official recordation and return of which are respectfully requested;
4. Credit Card Payment Form in the amount of \$40.00 to cover Recordation fee; and
5. One return postcard.

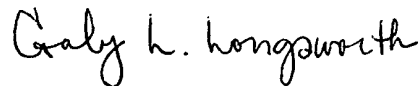
Director of the United States
Patent and Trademark Office
October 9, 2003
Page 2

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Gaby L. Longworth
Agent for Applicant
Registration No. 47,756

RWE/RCM/GLL/eaf
Enclosures

SKGF_DC1:186832.1

FEE TRANSMITTAL
for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.101.**TOTAL AMOUNT OF PAYMENT (\$40.00)**

Complete if Known

Application Number	09/229,173
Filing Date	January 13, 1999
First Named Inventor	CHATTERJEE, Deb K.
Examiner Name	Hutson, R.
Art Unit	1652
Attorney Docket No.	0942.2800008/RWE/RCM/GLL

METHOD OF PAYMENT (check all that apply)☐ Check ☒ Credit card ☐ Money Order ☒ Other** ☐ None

** Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

☐ Deposit Account

Deposit Account Number 19-0036

Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any over payments☐ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1105	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$0)**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

	Extra	Fee from below	Fee Paid
Total Claims _____ - 20** = _____ X _____ = _____			
Indep. Claims _____ - 3** = _____ X _____ = _____			
Multiple Dependent _____ = _____			

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple dependent claim, if not paid	
1204	86	2204	43	**Reissue independent claims over original patent	
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) (\$0)

**or number previously paid, if greater; For Reissue, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1502	50	2052	25	Surcharge-late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	\$40.00
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$40.00)**SUBMITTED BY**

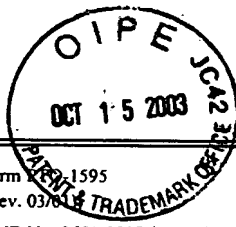
Complete (if applicable)

Name (Print/Type)	Gaby L. Longworth	Registration No. (Attorney/Agent)	47,756	Telephone	202-371-2600
Signature	Gaby L. Longworth			Date	October 9, 2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Form 1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)		RECORDATION FORM COVER SHEET PATENTS ONLY		U.S. Department of Commerce Patent and Trademark Office	
To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.					
1. Name of conveying party(ies): Life Technologies, Inc.		2. Name and address of receiving party(ies): Name: Invitrogen Corporation Internal Address: Street Address: 1600 Faraday Avenue City: Carlsbad State: CA Zip Code: 92008 Country: U.S.A. Additional name(s) & address(es) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no			
Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no					
3. Nature of Conveyance: <input type="checkbox"/> Assignment <input checked="" type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Effective Date: September 14, 2000					
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is _____ A. Patent Application No(s). 09/229,173					
B. Patent No(s).					
Additional numbers attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no					
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Sterne, Kessler, Goldstein & Fox P.L.L.C. Internal Address: c/o Gaby Longworth Street Address: 1100 New York Ave., N.W. City: Washington State: D.C. Zip Code: 20005-3934		6. Total number of applications and patents involved: <u>One</u> 7. Total fee (37 C.F.R. § 3.41).....\$ <u>40.00</u> <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to Deposit Account 8. Deposit Account Number: 19-0036 (Attach duplicate copy of this page if paying by deposit account)			
DO NOT USE THIS SPACE					
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> Gaby L. Longworth <u>Gaby L. Longworth</u> <u>October 9, 2003</u> Name of Person Signing Signature Date Registration No. 47,756					
Total number of pages including cover sheet, attachments and document <u>4</u>					
Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks, Box Assignments Washington, D.C. 20231					



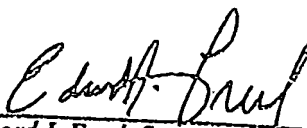
State of Delaware
Office of the Secretary of State PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"LIFE TECHNOLOGIES, INC.", A DELAWARE CORPORATION,
WITH AND INTO "INVITROGEN CORPORATION" UNDER THE NAME OF
"INVITROGEN CORPORATION", A CORPORATION ORGANIZED AND EXISTING
UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED
IN THIS OFFICE THE THIRTEENTH DAY OF SEPTEMBER, A.D. 2000, AT
4:30 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF
THE AFORESAID CERTIFICATE OF MERGER IS THE FOURTEENTH DAY OF
SEPTEMBER, A.D. 2000.




Edward J. Freel, Secretary of State

2753431 8100M

001468678

AUTHENTICATION: 0679689

DATE: 09-18-00

9-19-00 12:58
GCRF:GTO-

302 674 8340:2 2/ 7
NO.157 002

**CERTIFICATE OF MERGER
MERGING
LIFE TECHNOLOGIES, INC.
INTO
INVITROGEN CORPORATION**

Pursuant to Section 251 of the
General Corporation Law of Delaware

The undersigned corporation, organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST: That the name and state of incorporation of each of the constituent corporations of the merger is as follows:

Name	State of Incorporation
Life Technologies, Inc.	Delaware
Invitrogen Corporation	Delaware

SECOND: That an agreement and plan of merger between the parties to the merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the requirements of Section 251 of the General Corporation Law of the State of Delaware.

THIRD: That Invitrogen Corporation, a Delaware corporation, shall be the surviving corporation of the merger and its certificate of incorporation shall be the certificate of incorporation of the surviving corporation.

FOURTH: That the executed agreement and plan of merger is on file at the principal place of business of the surviving corporation. The address of the principal place of business of the surviving corporation is 1600 Faraday Avenue, Carlsbad, CA 92008.

FIFTH: That a copy of the agreement and plan of merger will be furnished by the surviving corporation, on request and without cost to any stockholder of any constituent corporation.

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SENT BY: _____

9-13-00 12:58
31556771477187358

CCMF:QTO-

302 674 8340: # 3/ 7
NJ. 157 003

SIXTH: That this Certificate of Merger shall be effective at 3:00 p.m. on
September 14, 2000.

Dated: September 13, 2000

Invitrogen Corporation,
a Delaware corporation

By: _____

Lyle C. Turner
President and CEO

ATTEST:

James R. Glynn
Executive V.P. and CFO

Copy Cert/OTN/2000403.1
100204-139722

09/13/2000 WED 11:36 (TX/RX NO 7050) 0003

COPY

Patentee:	Deb K. Chatterjee	Due Date:	n/a
		Art Unit:	n/a
		Examiner:	n/a
Patent No.:	5,948,614	Docket:	0942.2800006
Issue Date:	September 7, 1999	Atty:	RWE/BJD
For:	Cloned DNA Polymerases from <i>Thermotoga maritima</i> and Mutants Thereof		

When receipt stamp is placed hereon, the USPTO acknowledges receipt of the following documents:

1. SKGF Cover Letter;
2. Recordation Form Cover Sheet (Form PTO-1595);
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Jeffrey S. Lundgren
Victoria S. Rutherford
Eric D. Hayes

Of Counsel
Kenneth C. Bass III
Evan R. Smith

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*Admitted only in Virginia
*Practice Limited to
Federal Agencies

October 9, 2003

WRITER'S DIRECT NUMBER:
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INTERNET ADDRESS:
BRIAND@SKGF.COM

Director of the United States
Patent and Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Assignment Recordation Services

Re: U.S. Patent No. 5,948,614 ; Issue Date: September 7, 1999
(From Appl. No. 08/706,702; Filed: September 6, 1996)
For: **Cloned DNA Polymerases from *Thermotoga maritima* and Mutants Thereof**
Patentee: Deb K. Chatterjee
Our Ref: 0942.2800006/RWE/BJD

Sir:

Patentee submits the following documents for appropriate action by the U.S. Patent and Trademark Office:

1. Recordation Form Cover Sheet (Form PTO-1595);
2. PTO Fee Transmittal (PTO/SB/17);
3. PTO-2038 Credit Card Payment Form for \$40.00 to cover recordation fee(s) (37 C.F.R. § 1.21);
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Patent and Trademark Office
October 9, 2003
Page 2

hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

If extensions of time under 37 C.F.R. § 1.136 other than those otherwise provided for herewith are required to prevent abandonment and/or expiration of the present patent, then such extensions of time are hereby petitioned, and any fees therefor are hereby authorized to be charged to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Brian J. Del Buono
Attorney for Patentee
Registration No. 42,473

BJD/nef
Enclosures

::ODMA\MHODMA\SKGF_DC1;186766;1
SKGF Rev. 10.08.03 svb

RECORDATION FORM COVER SHEET
PATENTS ONLY

U.S. Department of Commerce
U.S. Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Life Technologies, Inc.

Additional name(s) of conveying party(ies) attached? ☐ yes ☒ no

3. Nature of Conveyance:

- ☐ Assignment ☒ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Effective Date: September 14, 2000

2. Name and address of receiving party(ies):

Name: Invitrogen Corporation

Internal Address:

Street Address: 1600 Faraday Avenue

City: Carlsbad State: CA Zip Code: 92008

Country: U.S.A.

Additional name(s) & address(es) attached? ☐ yes ☒ no

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is _____

A. Patent Application No(s).

B. Patent No(s).
5,948,614

Additional numbers attached? ☐ yes ☒ no

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

Internal Address: c/o 0942.2800006/RWE/BJD

Street Address: 1100 New York Ave., N.W.

City: Washington State: D.C. Zip Code: 20005-3934

6. Total number of applications and patents involved: One

7. Total fee (37 C.F.R. § 3.41).....\$ 40.00

- ☐ Enclosed
☒ Charge: PTO-2038 Credit Card Form Enclosed
☐ Authorized to be charged to Deposit Account

8. Deposit Account Number:

19-0036

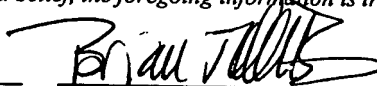
(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Brian J. Del Buono
Name of Person Signing
Registration No. 42,473


Signature

October 9, 2003
Date

Total number of pages including cover sheet, attachments and document Eight (8)

Mail documents to be recorded with required cover sheet information to:
Director of the U.S. Patent and Trademark Office, MS Assignment Recordation Services
PO Box 1450
Alexandria, VA 22313-1450

**FEE TRANSMITTAL
for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT (\$ 40.00****Complete if Known**

Patent Number	5,948,614
Issue Date	September 7, 1999
First Named Inventor	CHATTERJEE
Examiner Name	n/a
Art Unit	n/a
Attorney Docket No.	0942.2800006/RWE/BJD

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☒ Other** ☐ None
 ** Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

☐ Deposit Account
 Deposit Account Number 19-0036

Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any over payments☐ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1105	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Extra	Fee from below	Fee Paid
Total Claims _____ - 20** = _____ X _____ = _____		
Indep. Claims _____ - 3** = _____ X _____ = _____		
Multiple Dependent _____ = _____		

Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description
1202	2202	18	9	Claims in excess of 20
1201	2201	86	43	Independent claims in excess of 3
1203	2203	290	145	Multiple dependent claim, if not paid
1204	2204	86	43	**Reissue independent claims over original patent
1205	2205	18	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissue, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1502	50	2052	25	Surcharge-late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40.00**SUBMITTED BY**

Name (Print/Type)

Brian J. Del Buono

Registration No.
(Attorney/Agent)

42,473

Complete (if applicable)

Telephone 202-371-2600

Signature

Date

October 9, 2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

State of Delaware
Office of the Secretary of State

PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"LIFE TECHNOLOGIES, INC.", A DELAWARE CORPORATION,
WITH AND INTO "INVITROGEN CORPORATION" UNDER THE NAME OF
"INVITROGEN CORPORATION", A CORPORATION ORGANIZED AND EXISTING
UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED
IN THIS OFFICE THE THIRTEENTH DAY OF SEPTEMBER, A.D. 2000, AT
4:30 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF
THE AFORESAID CERTIFICATE OF MERGER IS THE FOURTEENTH DAY OF
SEPTEMBER, A.D. 2000.



A handwritten signature in cursive script, reading "Edward J. Freel".

Edward J. Freel, Secretary of State

2753431 8100M

001468678

AUTHENTICATION: 0679689

DATE: 09-18-00

9-13-00 12:58

GCNF:GTO-

302 674 8340:4 2/ 7
NO.157 002

**CERTIFICATE OF MERGER
MERGING
LIFE TECHNOLOGIES, INC.
INTO
INVITROGEN CORPORATION**

Pursuant to Section 251 of the
General Corporation Law of Delaware

The undersigned corporation, organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST: That the name and state of incorporation of each of the constituent corporations of the merger is as follows:

Name	State of Incorporation
Life Technologies, Inc.	Delaware
Invitrogen Corporation	Delaware

SECOND: That an agreement and plan of merger between the parties to the merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the requirements of Section 251 of the General Corporation Law of the State of Delaware.

THIRD: That Invitrogen Corporation, a Delaware corporation, shall be the surviving corporation of the merger and its certificate of incorporation shall be the certificate of incorporation of the surviving corporation.

FOURTH: That the executed agreement and plan of merger is on file at the principal place of business of the surviving corporation. The address of the principal place of business of the surviving corporation is 1600 Faraday Avenue, Carlsbad, CA 92008.

FIFTH: That a copy of the agreement and plan of merger will be furnished by the surviving corporation, on request and without cost to any stockholder of any constituent corporation.

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SENT BY:

9-13-00 12:58

GCNF:GTO-

302 674 8340: # 3/ 7
NJ.157 DB3


SIXTH:
September 14, 2000.

That this Certificate of Merger shall be effective at 3:00 p.m. on


Dated: September 13, 2000

Invitrogen Corporation,
a Delaware corporation

By:


Lyle C. Turner
President and CEO

ATTEST:


James A. Glynn
Executive V.P. and CFO

Grey Copy/GTN/6200403.1
102894-129722

09/13/2000 WED 11:36 [TX/RX NO 7050] @003